

Speed Controller

(Panel Mount)
P/N: CC-01

A low-cost manual velocity controller designed to interface between 12 or 24V battery power and a remote grounded proportional solenoid valve

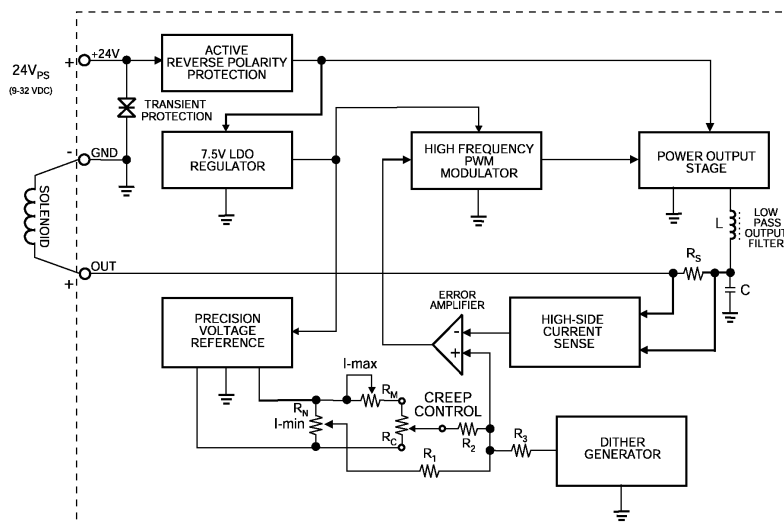
- Accepts a wide range of input operating voltages (12 or 24 VDC nominal)
- Manual control with a built-in potentiometer
- Regulated output of 2 Amps (adjustable)
- Efficient control
- Minimum output current adjustment to compensate for valve deadband
- Fixed superimposed dither to reduce valve hysteresis
- Reverse polarity protection inherent in design
- Short circuit protection
- Filter eliminates electrical noise
- Robust, rugged and highly reliable
- Compact size
- Direct panel mount for remote control of a proportional solenoid
- Version packaged in a metal box for remote mounting available
- Interfaces to a grounded solenoid (not supplied)
- Operational from -40 to 85°C



Application:

- material handling equipment
- aerial lift equipment
- mobile agricultural equipment
- proportional hydraulic circuits in a variety of mobile and industrial applications

BLOCK DIAGRAM



Technical Specifications:

All specifications are typical at nominal input voltage and 25 degrees C unless otherwise specified.

Input Specifications	
Power Source	12 or 24 VDC nominal (9 to 32 VDC)
Reverse Voltage Protection	Inherent in design
Short Circuit Protection	Provided
General Specifications	
Operating Temperature	-40 to 85°C (-40 to 185°F)
Solenoid Selection (nominal)	Solenoid selection should comply with: (V _{power supply} – 1.5V)/I-max = R coil
Electrical Connection	RED - Power + GREEN - Power GND and Output GND BLACK - Output + 24 in. of 18 AWG lead wires
Output Specifications	
Regulated Current Output	2 Amps (adjustable)
Dither (fixed)	180 Hz frequency 10% amplitude
Minimum Current Adjustment (10 turn trim pot)	0 to 500 mA (increases as trim pot is turned clockwise)
Maximum Current Adjustment (10 turn trim pot)	600 to 2000 mA (increases as trim pot is turned clockwise)
Dimensions	2.50 x 2.50 x 1.89 inches 63.7 x 63.7 x 48.2 mm (W x L x H)
Ordering Part Number:	CC-01

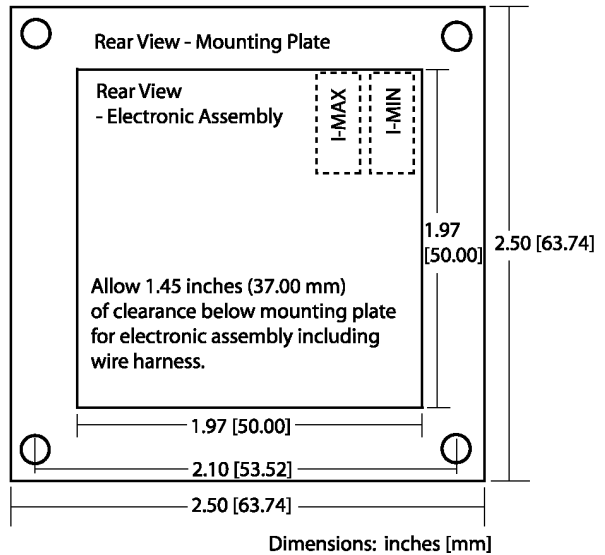
Mounting, Connections, Power Up and Adjustments

- Mounting holes accept four 8-32 screws (not supplied).
- Connect the power supply and solenoid (load). Refer to electrical connection for the pin out of the lead wires.
- Adjust the trim pots with a jeweller's screwdriver as described below.

Use the I-Min. trim pot to set up minimum speed with minimum control input.

Use the I-Max. trim pot to set maximum speed with 100% of control input.

Mounting holes (dia. 0.169 inches [4.3 mm]) accept four 8-32 screws.



- To increase manual control input, turn potentiometer knob clockwise. Fully clockwise represents a 2 A output or the maximum position. This results in the quickest movement of the valve (velocity).

Specifications are subject to update without notice.